

United States Patent [19]

875,532

§ 102(e) Date: Sep. 18, 1997

PCT Pub. Date: Aug. 8, 1996

[87] PCT Pub. No.: WO96/24076

PCT/EP96/00252

Sep. 18, 1997

Foreign Application Priority Data

[51] **Int. Cl.**⁶ **G02B 1/12**; C08G 63/91;

References Cited

U.S. PATENT DOCUMENTS

4,553,975 11/1985 Su 8/507

5,583,163 12/1996 Müller 525/61

Feb. 3, 1995 [CH] Switzerland 316/95

U.S. Cl. **264/1.38**; 264/496; 525/61;

Field of Search 525/61; 526/266;

526/266; 568/587; 568/588; 568/589; 523/108

568/587, 588, 589; 264/1.38, 496; 523/108

Müller et al.

[86] PCT No.:

[30]

[56]

§ 371 Date:

Patent Number: [11]

5,871,675

Date of Patent: Feb. 16, 1999 [45]

[54] CROSSLINKED TINTED POLYMERS FOREIGN PATENT DOCUMENTS 0072353A2 8/1982 European Pat. Off. .

[75] Inventors: Achim Müller, Aschaffenburg; Thomas 0388357A1 3/1990 European Pat. Off. . Pöhlmann, Niedernberg; Bernhard Seiferling, Goldbach, all of Germany

Primary Examiner—Jeffrey Smith Assistant Examiner—Wu C. Cheng

[73] Assignee: Novartis AG., Basel, Switzerland Attorney, Agent, or Firm-Michael U. Lee; R. Scott Meece

[21] Appl. No.: **ABSTRACT** [22] PCT Filed: Jan. 23, 1996

C08F 224/00; C07C 43/00

The invention relates to a novel process for the production of tinted mouldings, in particular tinted contact lenses, in which a crosslinkable tinted polymer comprising units containing a crosslinkable group and units containing a reactive dve radical is crosslinked in solution, and to tinted mouldings, in particular tinted contact lenses, obtainable by this process. The present invention likewise relates to novel crosslinkable tinted polymers comprising units containing a crosslinkable group and units containing a reactive dye radical which can be employed in the novel process, in particular derivatives of a polyvinyl alcohol having a molecular weight of at least about 2000, to crosslinked tinted polymers, either homopolymers or copolymers, made from these novel crosslinkable tinted polymers containing a reactive dve radical, a process for the preparation of the novel crosslinkable tinted polymers comprising units containing a crosslinkable group and units containing a reactive dye radical and the homopolymers and copolymers obtainable therefrom, to tinted mouldings made from said homopolymers or copolymers, in particular tinted contact lenses made from these homopolymers or copolymers, and to a process for the production of tinted contact lenses using said

49 Claims, No Drawings

homopolymers or copolymers.